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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,275	03/19/2004	Jon Christopher Connelly	100200514-1	7427

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
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2113

NOTIFICATION DATE	DELIVERY MODE
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06/10/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/804,275	Applicant(s) CONNELLY ET AL.	
	Examiner JOSEPH D. MANOSKEY	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9-14,16-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9-14 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 23-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Appeal

1. In view of the Appeal Brief filed on 19 February 2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

**/Robert W. Beausoliel, Jr./

Supervisory Patent Examiner, Art Unit 2113*.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. 1, 5-7, 9-13, 17-21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller, U.S. Patent 6,742,141 in view of Curley et al., U.S. Patent 7,143,194, hereinafter referred to as "Curley".

4. Referring to claim 1, Miller teaches a method for analyzing the root cause of system failures on one or more computers, comprising: generating an event when a computer system detects a system failure (column 12 lines 53-55); determining the cause of the system failure (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found); transmitting the event, including the determined cause, from the computer system to a central repository (column 13 lines 27-32); and analyzing the system failure event in the central repository (column 13 lines 27- 32). Miller also teaches storing the event in a local repository located on the computer system (column 13 lines 23-32).

Miller does not teach synchronizing the local repository and the central repository, wherein the synchronizing step comprises: transmitting missing event in the central repository from the computer system. Miller does however teach additional support may be used if a solution to an event cannot be found and a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base (column 19 lines 40-42, lines 57-58; column 19 line 64 - column 20

line 18). Miller also teaches the customer site collects all relevant information about the configuration of the customer facility, including information about the problem, and transfers the information to the central location (See Col. 5, lines 30-34).

Curley teaches synchronizing of an update from a client computer to a server database (See Col. 2, lines 44-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the error analyzing method of Miller with client and server synchronizing method of Curley. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because it allows the client to update the server while minimizing the number of network connections (See Curley, Col. 2, lines 44-61).

5. Referring to claim 5, Miller and Curley teach all the limitations (See rejection of claim 1) including determining if the system failure was due to a hardware problem by analyzing a file log (See Miller, column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-42, hardware logs are stored).

6. Referring to claim 6, Miller and Curley teach all the limitations (See rejection of claim 1) including determining if the system failure was due to a software problem by analyzing system core files (See Miller, column 9 lines 39-43: registry files are monitored).

7. Referring to claim 7, Miller and Curley teach all the limitations (See rejection of claim 1) including assigning a sequence number to each event generated (See Miller, column 17 lines 27-40); receiving a status request from the central repository (See Miller, column 17 lines 39-40); and synchronizing the local repository and the central repository if the sequence number does not match the expected sequence number (See Miller, column 17 lines 40-54).

8. Referring to claim 9, Miller and Curley teach all the limitations (See rejection of claim 1) including wherein the synchronizing step further comprises: transmitting missing events in the local repository from the central repository (See Miller, column 18 lines 5-10).

9. Referring to claim 10, Miller and Curley teach all the limitations (See rejection of claim 1) including wherein the synchronizing step further comprises: discarding events that have already been received (See Miller, column 18 lines 5-10). Miller teaches using just the incremental update therefore anything that is not a change is ignored, thus not using events already received.

10. Referring to claim 11, Miller and Curley teach all the limitations (See rejection of claim 1) including retransmitting the information stored in the central repository to another computer system for further analysis (See Miller, column 11 lines 14-21: master

knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

11. Referring to claim 12, Miller teaches an apparatus for analyzing the root cause of system failures on one or more computers, comprising: a network (figure 7 item 122); a local support computer coupled to said network (figure 7 item 120); and a computer system coupled to the network (figure 7 item 124), said computer system programmed to monitor itself and another computer system for system failures (column 4 lines 12-27), to determine the cause of the system failure, and to transmit system failure events to said local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found). Miller also teaches storing the event in a local repository located on the computer system (column 13 lines 23-32).

Miller does not teach synchronizing the local repository and the central repository, wherein the synchronizing step comprises: transmitting missing events in the central repository from the computer system. Miller does however teach additional support may be used if a solution to an event cannot be found and a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base (column 19 lines 40-42, lines 57-58; column 19 line 64 - column 20 line 18). Miller also teaches the customer site collects all relevant information about the configuration of the customer facility, including information about the problem, and transfers the information to the central location (See Col. 5, lines 30-34).

Curley teaches synchronizing of an update from a client computer to a server database (See Col. 2, lines 44-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the error analyzing method of Miller with client and server synchronizing method of Curley. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because it allows the client to update the server while minimizing the number of network connections (See Curley, Col. 2, lines 44-61).

12. Referring to claim 13, Miller and Curley teach all the limitations (See rejection of claim 12) including the local support computer programmed to collect and analyze the system failure information (See Miller, column 13 lines 27-32).

13. Referring to claim 17, Miller and Curley teach all the limitations (See rejection of claim 12) including the computer system programmed to determine if the system failure was due to a hardware problem by analyzing a file log (See Miller, column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-42, hardware logs are stored).

14. Referring to claim 18, Miller and Curley teach all the limitations (See rejection of claim 12) including the computer system programmed to determine if the system failure was due to a software problem by analyzing system core files (See Miller, column 9 lines 39-43: registry files are monitored).

15. Referring to claim 19, Miller and Curley teach all the limitations (See rejection of claim 14) including the computer system programmed to assign a sequence number to each event generated (See Miller, column 17 lines 27-40); the local support computer programmed to send a status request to the computer system (See Miller, column 17 lines 39-40), and to synchronize the local repository with the local support computer if the sequence number does not match the expected sequence number (See Miller, column 17 lines 40-54).

16. Referring to claim 20, Miller and Curley teach all the limitations (See rejection of claim 12) including a remote support computer connectable to the local support computer for receiving system failure data from said local support computer (See Miller, column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

17. Referring to claim 21, Miller discloses a means for analyzing the root cause of system failures on one or more computers, comprising: a means for transmitting data from one computer to another (figure 7 item 122), a local support computer coupled to said means for transmitting data (figure 7 item 120), a computer system coupled to said means for transmitting data (figure 7 item 124), a means for said computer system to monitor itself or another computer system (column 4 lines 12-27), for system failures and determining the causes of said failures, a means for transmitting the causes of said

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failures to the local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found). Miller also teaches storing the event in a local repository located on the computer system for storing the event (column 13 lines 23-32).

Miller does not teach means for synchronizing the local repository and a repository of the local support computer, wherein the synchronizing step comprises: a means for transmitting missing events in the central repository from the computer system. Miller does however teach additional support may be used if a solution to an event cannot be found and a remote operator works in conjunction with the customer site to create a new entry for the master knowledge base (column 19 lines 40-42, lines 57-58; column 19 line 64 - column 20 line 18). Miller also teaches the customer site collects all relevant information about the configuration of the customer facility, including information about the problem, and transfers the information to the central location (See Col. 5, lines 30-34).

Curley teaches synchronizing of an update from a client computer to a server database (See Col. 2, lines 44-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the error analyzing method of Miller with client and server synchronizing method of Curley. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because it allows the client to update the server while minimizing the number of network connections (See Curley, Col. 2, lines 44-61).

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18. Claims 2, 4, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Curley in view of Null (Null, Linda: The Essentials of Computer Organization and Architecture. © 2003 Jones and Bartlett).

19. Referring to claim 2, Miller and Curley teach all the limitations (See rejection of claim 1) except re-transmitting the event if a receipt confirmation message is not received from the central repository. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

20. Referring to claim 4, Miller and Curley disclose all the limitations (See rejection of claim 1) except holding the event in a queue if a receipt confirmation message is not received from the central repository; and re-transmitting the event in the queue after a period of time. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

21. Referring to claim 14, Miller and teach Curley all the limitations (See rejection of claim 12) except the computer system programmed to re-transmit the event if a receipt confirmation message is not received from the local support computer. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to

determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.⁹

22. Referring to claim 16, Miller and Curley teach all the limitations (See rejection of claim 12) except the computer system programmed to hold the event in a queue if a receipt confirmation message is not received from the central repository, and to re-transmit the event in the queue after a period of time. Null discloses that TCP - a well known internet protocol in the art (page 512, section 11.5) - is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses

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that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections~ though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

Allowable Subject Matter

23. Claims 23-25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

24. Applicant's arguments, see pages 7-10 of appeal, filed 29 February 2008, with respect to the rejection(s) of claim(s) 1,2,4-7,9-14,16-21 and 23-25 under 35 U.S.C. 102(e) and 25 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new found prior art, see above rejections.

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25. Referring to Claim 10, the Applicant argues that Miller does not teach discarding events that have already been received. The Examiner respectfully disagrees. Miller teaches using just the incremental update therefore anything that is not a change is ignored, thus not using events already received (See Miller, column 18 lines 5-10). The above rejection has been modified to include this clarification.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH D. MANOSKEY whose telephone number is (571)272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDM

May 23, 2008

/Robert W. Beausoliel, Jr./

Supervisory Patent Examiner, Art Unit 2113